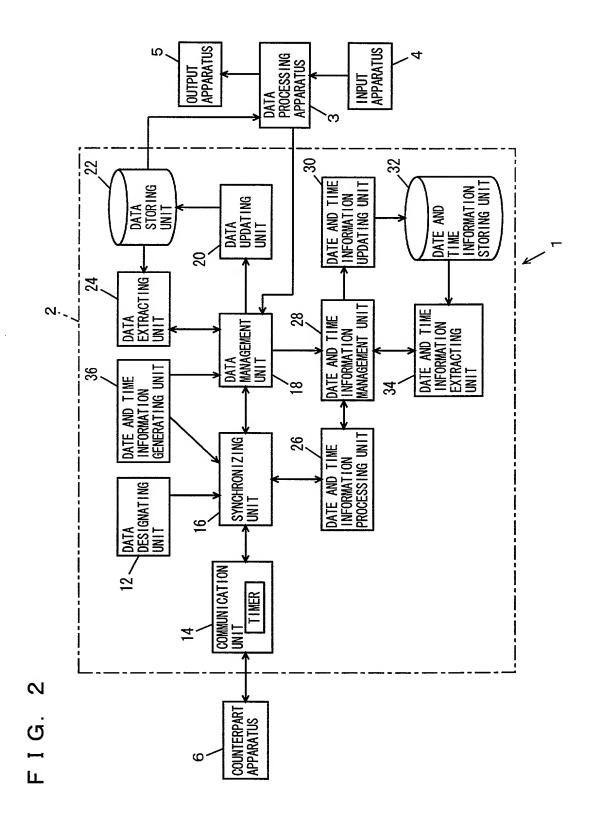
F I G. 1

T 1 MC	DBUCES	APPARATUS A	us a	APPARATUS B	TUS B	APPARATUS C	ns c
	LINGERGO	DATA	UPDATE INFORMATION	DATA	UPDATE INFORMATION	DATA	UPDATE INFORMATION
10		$\alpha$ 0(t0, t0)	0	$\alpha$ 0(t0,t0)	0	$\alpha$ 0(t0,t0)	]
#	UPDATE $lpha$ in apparatus $c$		0		0	α1 (t0, t1)	1
t2	UPDATE $lpha$ in apparatus a	α2(t0, t2)	×		0		l
t3	SYNCHRONIZE BETWEEN APPARATUSES A AND B		0	$\alpha 2 (t0, t2)$	0		
t4	SYNCHRONIZE BETWEEN APPARATUSES A AND C		0		0	α1(t0,t1)	I
	RESULT	α2(t0, t2)	0	$\alpha 2 (t0, t2)$	0	α1(t0,t1)	ļ



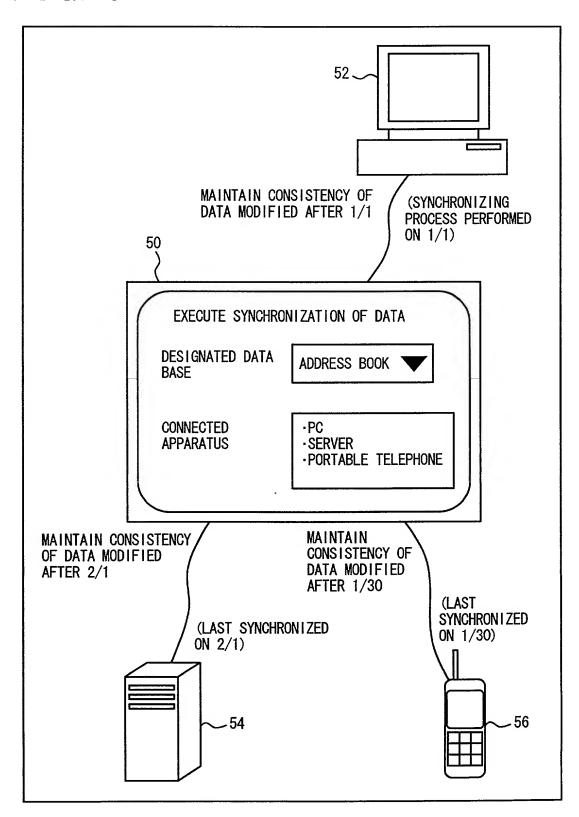
## F I G. 3

DATA BASE	DATA	DATE AND TIME	DATE AND TIME	DATE AND TIME
TYPE	NUMBER	OF NEW CREATION	OF UPDATING	OF DELETION
ADDRESS BOOK	1	2000/01/01 00:01:23	2000/01/02 00:12:34	-
ADDRESS BOOK	2	2000/02/02 12:34:56	_	2000/02/22 21:10:00
SCHEDULE	1	2000/02/01	2000/02:02	2000/02/03
BOOK		12:59:59	10:00:00	15:23:46

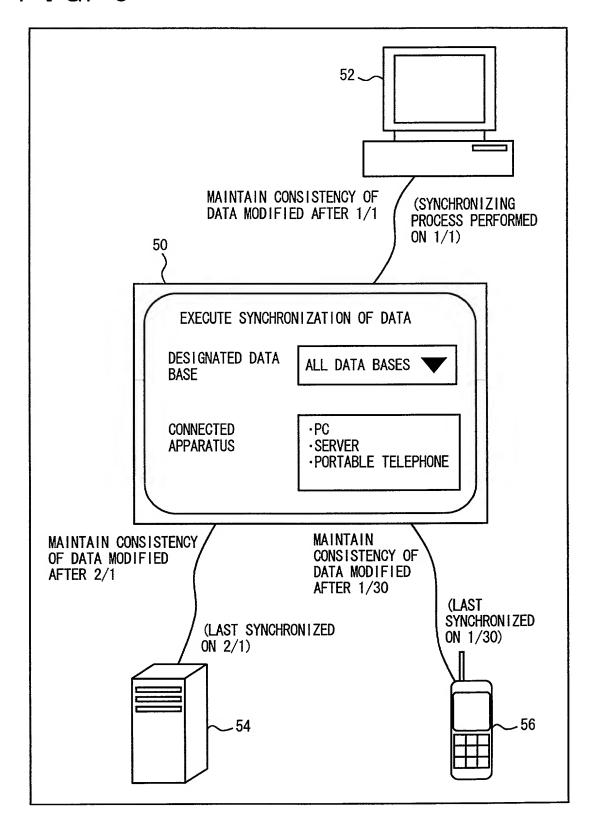
## F I G. 4

APPARATUS NUMBER	APPARATUS IDENTIFICATION NUMBER	APPARATUS NAME	APPARATUS INFORMATION	DATA BASE TIME	DATE AND TIME OF SYNCHRONIZING PROCESS
1	123. 456. 789	PERSONAL PORTABLE TELEPHONE	PORTABLE TELEPHONE	ADDRESS BOOK	2000/01/01 00:01:23
2	000. 111. 222	OFFICE PC	PC	ADDRESS BOOK	2000/02/02 12:34:56
3	987. 654. 321	OFFICE SERVER	SERVER	SCHEDULE BOOK	2000/02/02 12:59:59

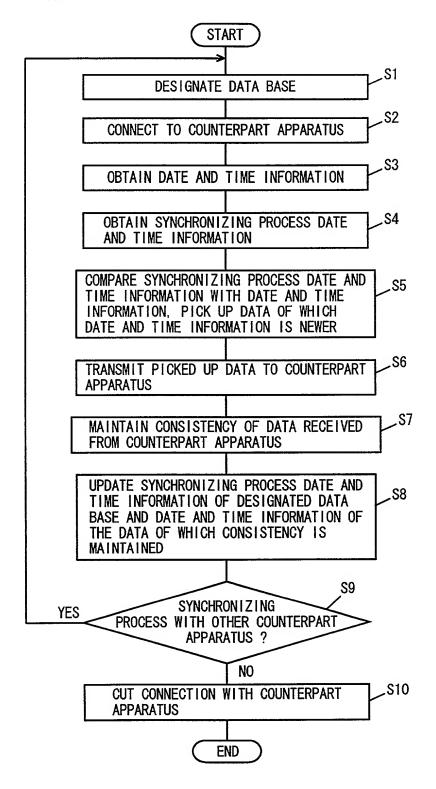
F I G. 5



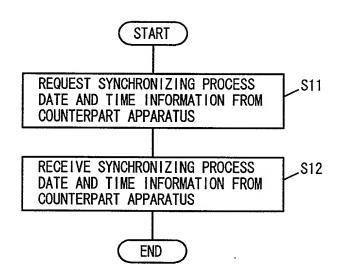
F I G. 6



F I G. 7

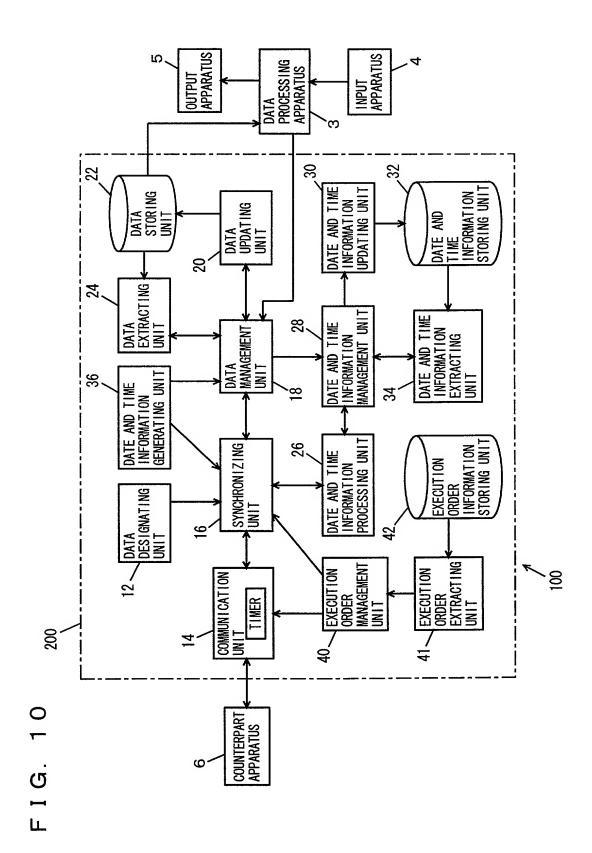


F I G. 8



F I G. 9

T 196	SSEVUED		APPARATUS A		APPARATUS B	APPARATUS C
	LYOCKES	DATA	TIME POINT SYNCHRONIZI	TIME POINT OF LAST SYNCHRONIZING PROCESS	DATA	DATA
			A – B	A – C		
\$	NEWLY GREATE DATA α IN APPARATUS A	α0(t0, t0)	_	ı	-	1
<del>11</del>	SYNCHRONIZING PROCESS BETWEEN APPARATUSES A AND B	$\alpha$ 0(t0, t0)	_		$\alpha 0 (t0, t0)$	
t2	SYNCHRONIZING PROCESS BETWEEN APPARATUSES A AND C	$\alpha$ 0(t0, t0)	t1	1	$\alpha$ 0(t0, t0)	$\alpha$ 0(t0,t0)
t3	UPDATE $lpha$ in apparatus c	$\alpha$ 0(t0, t0)	t1	t2	$\alpha$ 0(t0, t0)	$\alpha$ 1 (t0, t3)
t4	UPDATE $\alpha$ IN APPARATUS A	α2(t0, t4)	£1	t2	$\alpha$ 0(t0, t0)	$\alpha$ 1(t0,t3)
t5	SYNCHRONIZING PROCESS BETWEEN APPARATUSES A AND B	$\alpha 2 (t0, t4)$	t1	t2	α2(t0, t4)	$\alpha$ 1 (t0, t3)
t6	SYNCHRONIZING PROCESS BETWEEN APPARATUSES A AND C	α2(t0, t4)	<b>t</b> 5	t2	$\alpha$ 2(t0, t4)	$\alpha 2 (t0, t4)$
	RESULT	$\alpha 2 (t0, t4)$	t5	t6	$\alpha$ 2(t0, t4)	$\alpha 2 (t0, t4)$



## FIG. 11

NUMBER	APPARATUS IDENTIFICATION NUMBER	APPARATUS NAME	EXECUTION ORDER INFORMATION
1	123. 456. 789	PERSONAL PORTABLE TELEPHONE	1
2	000. 111. 222	OFFICE PC	3
3	987. 654. 321	OFFICE SERVER	2

1

FIG. 12

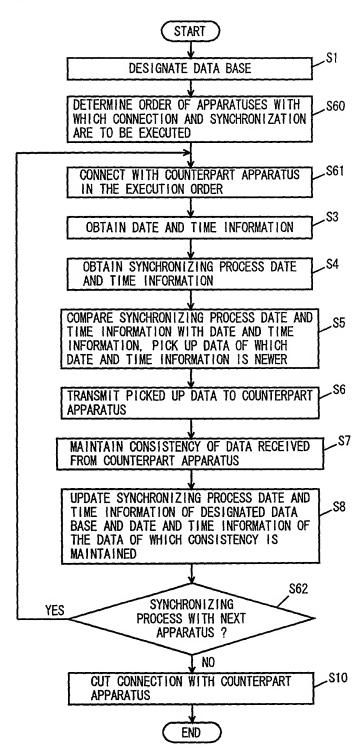


FIG. 13

			APPARATUS A	TUS A			APPARATUS B	TUS B	APPARA	APPARATUS C	APPARATUS	ATUS D
Ϊ	PROCESS	DATA		LAST	LAST SYNCHRONIZING PROCESS TIME	IZING	DATA		DATA		DATA	
		DATA $\alpha$	DATA B	A - B	A - C	A - D	DATA $\alpha$	DATA B	DATA $\alpha$	DATA B	DATA $\alpha$	DATA B
유	NEWLY CREATE DATA $\alpha$ IN APPARATUS A	α0(t0, t0)	l		_	-	-	l	1	I	1	ı
#	NEWLY CREATE DATA $\beta$ In Apparatus B	α0(t0, t0)	1	ı	ı	1	ł	β0(t1, t1)	1	1	1	
t2	SYNCHRONIZING PROCESS BETWEEN APPARATUSES A AND B	α0(t0, t0)	B0(t1, t1)	t2	1		α0(t0, t0)	β0(t1, t1)	-	1	ı	1
t3	SYNCHRON IZING PROCESS BETWEEN APPARATUSES A AND C	α0(t0, t0)	β0(t1, t1)	t2	t3		α0(t0, t0)	β0(t1, t1)	α0(t0, t0)	B0(t1, t1)	1	ı
#	SYNCHRONIZING PROCESS  BETWEEN APPARATUSES A AND D	α0(t0, t0)	β0(t1, t1)	t2	t3	t4	α0(t0, t0)	β0(t1, t1)	α0(t0, t0)	β0(t1, t1)	$\alpha$ 0(t0,t0)	β0(t1, t1)
<b>t</b> 2	UPDATE $lpha$ in apparatus $c$	$\alpha 0 (t0, t0)$	β0(t1, t1)	<b>7</b> 3	£3	t4	$\alpha 0 (t0, t0)$	β0(t1, t1)	α1 (t0, t5)	β0(t1, t1)	$\alpha 0 (t0, t0)$	β0(t1, t1)
te	UPDATE $\alpha$ in apparatus a	α2(t0, t6)	β0(t1, t1)	77	t3	t4	$\alpha 0 (t0, t0)$	$\alpha 0(t0, t0) \beta 0(t1, t1)$	α1(t0, t5) β0(t1, t1)	β0(t1, t1)	$\alpha 0 (t0, t0)$	β0(t1, t1)
t7	SYNCHRONIZING PROCESS BETWEEN APPARATUSES A AND B	α2(t0, t6)	β0(t1, t1)	<b>t</b> 2	t3	t4	α2(t0, t6)	β0(t1, t1)	α1(t0, t5)	β0(t1, t1)	α0(t0, t0)	β0(t1, t1)
t9	SYNCHRONIZING PROCESS BETWEEN APPARATUSES A AND C	α2(t0, t6)	β0(t1, t1)	£6	ಚ	<b>t</b> 4	α2(t0, t6)	β0(t1, t1)	α2(t0, t6)	β0(t1, t1)	α0(t0, t0)	β0(t1, t1)
t9	SYNCHRONIZING PROCESS BETWEEN APPARATUSES A AND D	α2(t0, t6)	β0(t1, t1)	t6	£8	£4	α2(t0, t6)	$\beta$ 0(t1, t1) $\alpha$ 2(t0, t6)		β0(t1, t1)	α2(t0, t6)	β0(t1, t1)
	RESULT	α2(t0, t6)	β0(t1, t1)	te	£8	t9	$\alpha 2 (t0, t6)$	$\alpha 2(t0, t6) \beta 0(t1, t1) \alpha 2(t0, t6) \beta 0(t1, t1)$	$\alpha 2 (t0, t6)$	B0(t1, t1)	$\alpha 2 (t0, t6) \beta 0 (t1, t1)$	β0(t1, t1)

## FIG. 14

